

Spezifikation für Freigabe / specification for release

Kunde / customer : _____
 Artikelnummer / part number : **748411245**
 Bezeichnung : **SMD-Balun WE-BAL**
 description : **Chip-Balun WE-BAL**

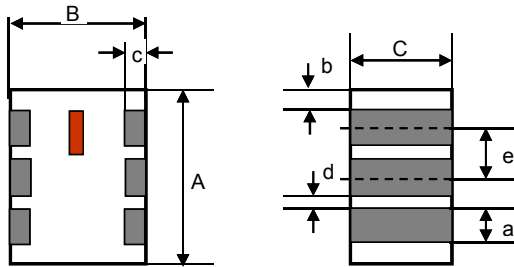
LF



DATUM / DATE : 2004-12-14

A Mechanische Abmessungen / dimensions:

size	0603	
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A	1,6 ± 0,1	mm
B	0,8 ± 0,1	mm
C	0,6 ± 0,1	mm
a	0,2 ± 0,1	mm
b	0,2 + 0,1/-0,2	mm
c	0,15 ± 0,1	mm
d	0,3 ± 0,1	mm
e	0,5 ± 0,05	mm

B Elektrische Eigenschaften / electrical properties:

Eigenschaften / properties	Testbedingungen / test conditions		Wert / value	Einheit / unit	tol.
Frequenzbereich / frequency range		f	2400 ... 2500	MHz	
Einfügedämpfung / insertion loss	2400 ... 2500 MHz		1,3	dB	max.
Einfügedämpfung / insertion loss	2400 ... 2500 MHz		1,00	dB	typ.
VSWR / VSWR	2400 ... 2500 MHz		2,0		max.
VSWR / VSWR	2400 ... 2500 MHz		1,22		typ.
Phasendifferenz / phase imbalance			180	°	± 10°
Amplitudendifferenz / amplitude imbalance			2,0	dB	max.
Eingangsimpedanz / unbalanced impedance		Z	50	Ω	typ.
Ausgangsimpedanz / balanced impedance		Z	100	Ω	typ.

C Abbildung / appearance:



D Prüfgeräte / test equipment:

Network Analyzer Agilent E5071B

E Testbedingungen / test conditions:

Luftfeuchtigkeit / humidity: 50 ~ 70%
 Umgebungstemperatur / temperature: 20°C ~ 25°C

F Werkstoffe & Zulassungen / material & approvals

Basismaterial / base material: Keramik / ceramic
 Kontaktmaterial / contact plating: AG + Ni + Sn

G Eigenschaften / general specifications:

Betriebstemp. / operating temperature: -40°C - +85°C
 Lagerbedingungen / storage conditions: 15°C ~ 35°C
 45 ~ 75% RH
 Leistung / power capacity: 0,5 W max.

Freigabe erteilt / general release:	Kunde / customer			
.....			
Datum / date	Unterschrift / signature			
	Würth Elektronik	OO	Version 3	10-11-02
		AWe	Version 2	05-07-06
.....	AWe	Version 1	04-12-14
Geprüft / checked	Kontrolliert / approved	Name	Änderung / modification	Datum/date

Würth Elektronik eiSos GmbH & Co.KG

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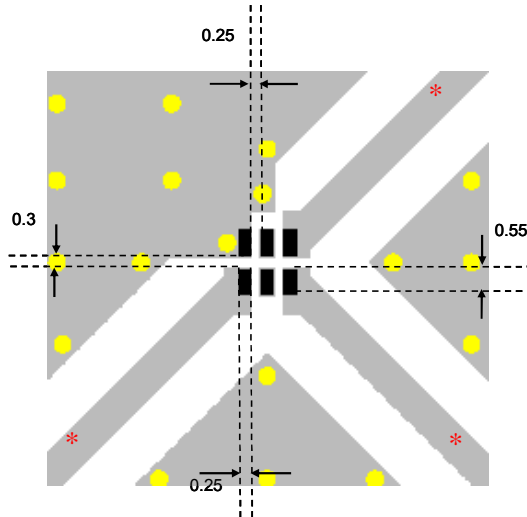
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H Lötadempfehlung / solder pads:

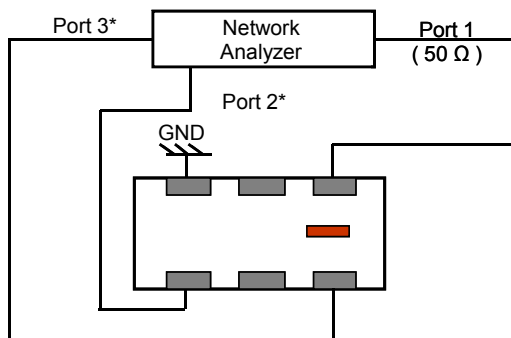


* Line width should be designed to provide proper impedance matching characteristics, depending on PCB material and thickness.

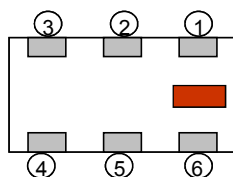
- Solder Resist
- Land
- Through-hole (Ø 0.3)

Units: mm

K Messdiagramme/ measuring diagrams:



* Impedance for ports 2 and 3 = 1/2 (Balanced Impedance)



No.	Terminal Name	No.	Terminal Name
①	Unbalanced Port (IN)	④	Balanced Port (OUT 1)
②	NC	⑤	NC
③	GND / DC-Feed / RF-GND	⑥	Balanced Port (OUT 2)

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WÜRTH ELEKTRONIK

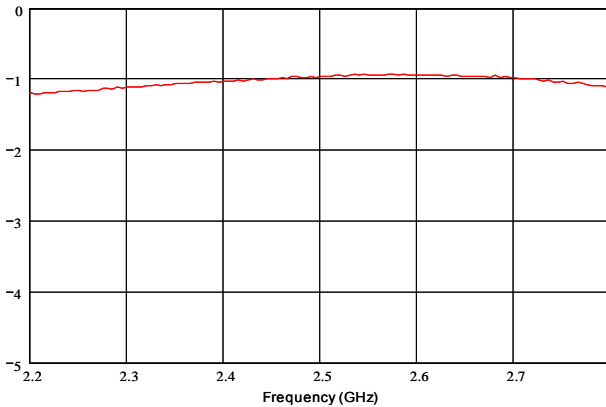
Bezeichnung : SMD-Balun WE-BAL

description : Chip-Balun WE-BAL

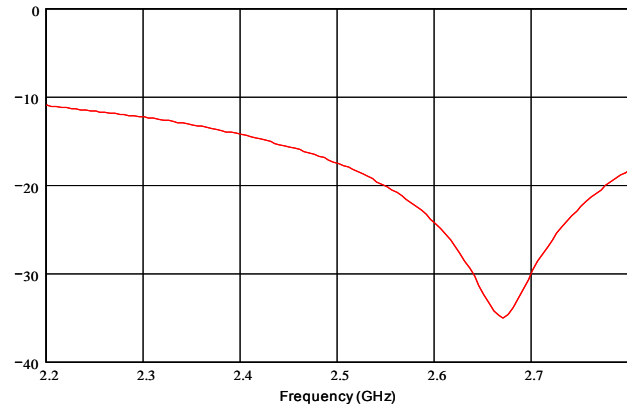
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L Messdiagramme / measuring diagrams:

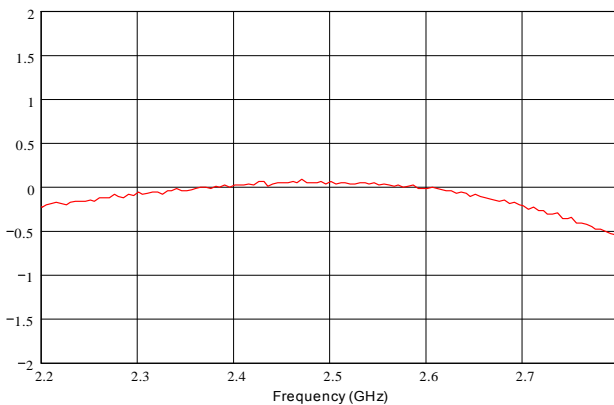
Insertion Loss (dB)



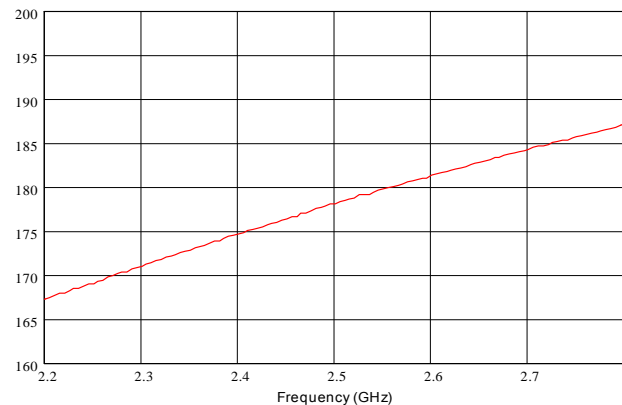
Return Loss (dB)



Amplitude Balance (dB)



Phase Balance (degree)



This electronic component has been designed and developed for usage in general electronic equipment. Before incorporating this component into any equipment where higher safety and reliability is especially required or if there is the possibility of direct damage or injury to human body, for example in the range of aerospace, aviation, nuclear control, submarine, transportation, (automotive control, train control, ship control), transportation signal, disaster prevention, medical, public information network etc, Würth Elektronik eiSos GmbH must be informed before the design-in stage. In addition, sufficient reliability evaluation checks for safety must be performed on every electronic component which is used in electrical circuits that require high safety and reliability functions or performance.

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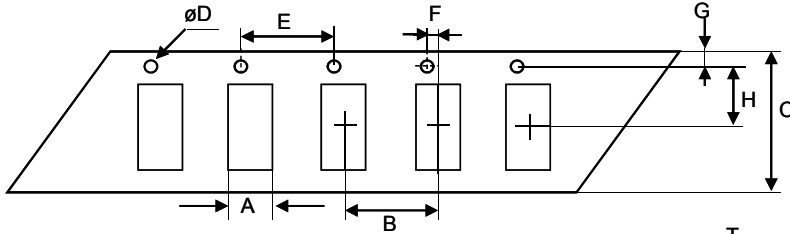
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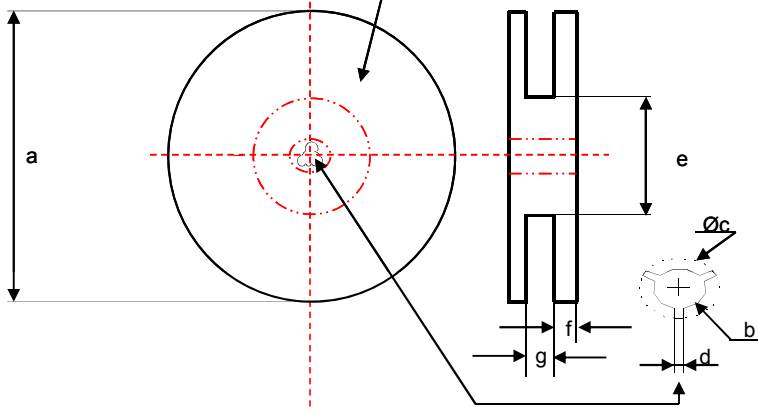


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I Rollenspezifikation / tape and reel specification :

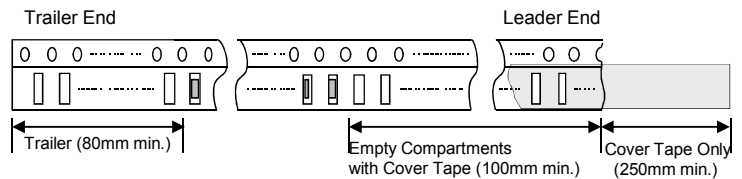
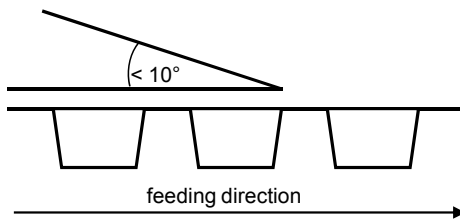


Gurtspezifikation / Tape specification:		
A	0,95 ± 0,1	mm
B	4,0 ± 0,1	mm
C	8,0 ± 0,2	mm
D	1,5 +0,1/-0,0	mm
E	4,0 ± 0,1	mm
F	2,0 ± 0,05	mm
G	1,75 ± 0,1	mm
H	3,5 ± 0,1	mm
I	1,8 ± 0,1	mm
J	0,85 max.	mm
T	0,2 ± 0,05	mm



Rollenspezifikation / Reel specification:		
a	178,0 ± 2,0	mm
b	13,0 ± 0,3	mm
c	21,8 ± 0,8	mm
d	2,0 ± 0,5	mm
e	60,0 ± 0,5	mm
f	1,2 ± 2,0	mm
g	9,0 ± 0,3	mm

The force for tearing off cover tape is 10 to 130 grams in arrow direction



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